

## COMMONWEALTH OF MASSACHUSETTS | PUBLIC EMPLOYEE RETIREMENT ADMINISTRATION COMMISSION

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## MEMORANDUM

TO: Plymouth County Retirement Board

FROM: John W. Parsons, Esq., Executive Director

RE: Approval of Funding Schedule

DATE: January 19, 2021

This Memorandum supersedes the PERAC Memo dated January 8, 2021. The Board initially forwarded to PERAC a schedule that it had not adopted. The schedule enclosed with this memorandum is the schedule that the Board ultimately did adopt.

This Commission is hereby furnishing you with approval of the revised funding schedule you recently adopted (copy enclosed). The schedule assumes payments are made in equal installments on July 1 and January 1 of each fiscal year. The schedule is effective in FY21 (since the amount under the prior schedule was maintained in FY21) and is acceptable under Chapter 32.

We are approving the schedule because the schedule aggressively funds the plan by completing the amortization of the unfunded liability by FY29. However, we reiterate our past concerns about the plan assumptions. The Board maintained the 7.875% investment return assumption from 2019. This assumption is the highest of any Chapter 32 plan and is outside PERAC's reasonable range for this assumption as of January 1, 2020. We have generally recommended an assumption of 6.90% to 7.15% for our 2020 PERAC valuations. For comparison, 67 systems currently use an assumption of 7.25% or lower. There are 23 systems using an assumption of 7.30% - 7.50%.

In our approval last year, we noted that your actuary recommended updating the mortality assumption. The Board instead maintained the assumption adopted in the 2017 valuation. That assumption was used again in this valuation. This mortality assumption is significantly less conservative than the current standard PERAC assumption which is based on a study of local system retiree mortality completed in 2019. Based on our analysis of local systems as well as the State Retirement System, we could not justify the assumption used in your valuation. We also note there is a loss shown on page 3 of the January 1, 2019 actuarial valuation of \$26.6 million due to retiree mortality and data adjustments indicating actual experience did not match this assumption.





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We estimate that if the plan used a 7.15% investment return assumption and the PERAC mortality assumption, the actuarial liability (and unfunded actuarial liability) would increase over \$200 million and the funded ratio would decrease to about 54%.

We also note that the schedule contains a "balloon payment" in FY29 that is about \$80 million higher than the schedule would call for if the payment were increased 8.0%. It is our understanding that the Board requested a schedule that both maintains the annual increase in the appropriation payments to 8.0% and completes the amortization of the UAL by FY29.

If you have any questions, please contact PERAC's Actuary, John Boorack, at (617) 666-4446, extension 935.

JWP/jfb

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## **Appropriation Forecast**

Fiscal	•	Employer	Amortization	Employer	Employer		
Year	Employee	Normal Cost	Payments	Total Cost	Total Cost	Unfunded	Funded
Ending	Contribution	with Interest	with Interest	with Interest	% of Payroll	<u>Liability</u>	Ratio %**
2021	\$26,181,441	\$6,579,987	\$74,572,227	\$81,152,214	27.5	\$693,317,164	61.0
2022	\$27,387,394	\$6,589,518	\$81,054,873	\$87,644,391	28.7	\$672,476,710	62.8
2023	\$28,646,976	\$6,590,511	\$88,065,431	\$94,655,942	29.8	\$643,352,148	65.2
2024	\$29,962,512	\$6,582,311	\$95,646,106	\$102,228,417	31.1	\$604,746,137	68.0
2025	\$31,336,430	\$6,564,228	\$103,842,463	\$110,406,691	32.3	\$555,323,230	71.2
2026	\$32,771,256	\$6,535,533	\$112,703,693	\$119,239,226	33.7	\$493,595,500	74.9
2027	\$34,269,627	\$6,495,455	\$122,282,909	\$128,778,364	35.0	\$417,906,744	79.2
2028	\$35,834,292	\$6,443,181	\$132,637,452	\$139,080,633	36.5	\$326,415,138	84.1
2029	\$37,468,115	\$6,377,851	\$225,043,294	\$231,421,145	58.5	\$217,074,211	89.6
2030	\$39,174,082	\$6,298,561	\$0	\$6,298,561	1.5	\$0	100.0
2031	\$40,955,308	\$6,204,356	\$0	\$6,204,356	1.5	\$0	100.0
2032	\$42,815,037	\$6,094,227	\$0	\$6,094,227	1.4	\$0	100.0
2033	\$44,756,652	\$5,967,115	\$0	\$5,967,115	1.3	\$0	100.0
2034	\$46,783,680	\$5,821,898	\$0	\$5,821,898	1.2	\$0	100.0
2035	\$48,899,795	\$5,657,400	\$0	\$5,657,400	1.1	\$0	100.0
2036	\$51,108,830	\$5,472,377	\$0	\$5,472,377	1.1	\$0	100.0
2037	\$53,414,778	\$5,265,521	\$0	\$5,265,521	1.0	\$0	100.0
2038	\$55,821,799	\$5,035,456	\$0	\$5,035,456	0.9	\$0	100.0
2039	\$58,334,232	\$4,780,731	\$0	\$4,780,731	0.8	\$0	100.0
2040	\$60,956,599	\$4,499,821	\$0	\$4,499,821	0.8	\$0	100.0
2041	\$63,693,611	\$4,191,119	\$0	\$4,191,119	0.7	\$0	100.0
2042	\$66,550,178	\$3,852,937	\$0	\$3,852,937	0.6	\$0	100.0
2043	\$69,531,419	\$3,483,498	\$0	\$3,483,498	0.5	\$0	100.0
2044	\$72,138,847	\$3,614,129	\$0	\$3,614,129	0.5	\$0	100.0
2045	\$74,844,053	\$3,749,659	\$0	\$3,749,659	0.5	\$0	100.0
2046	\$77,650,705	\$3,890,271	\$0	\$3,890,271	0.5	\$0	100.0
2047	\$80,562,607	\$4,036,156	\$0	\$4,036,156	0.5	\$0	100.0
2048	\$83,583,705	\$4,187,512	\$0	\$4,187,512	0.5	\$0	100.0
2049	\$86,718,094	\$4,344,544	\$0	\$4,344,544	0.5	\$0	100.0
2050	\$89,970,022	\$4,507,464	\$0	\$4,507,464	0.5	\$0	100.0
2051	\$93,343,898	\$4,676,494	\$0	\$4,676,494	0.5	\$0	100.0
2052	\$96,844,294	\$4,851,863	\$0	\$4,851,863	0.5	\$0	100.0